# WyIR Interface Project Stages

This document describes in detail the various stages involved when developing an interface with the WyIR.  The following terms are given to the parties involved in this project:

> WyIR Team – The Wyoming Department of Health's Immunization Registry (WyIR) staff.

> Facility – The clinic that is the point of administration of vaccines that is wishing to connect to the WyIR via HL7.

> Facility Contact – The person responsible for their Facility, as defined in the WyIR Provider Enrollment Agreement.

> EHR Vendor – Refers to the Electronic Health Record (EHR) vendor utilized by the Facility.

> THR Team – The Wyoming Department of Health's Total Health Record staff.

**1. DISCOVERY** –Initial information about the Facility is gathered to assess readiness in moving forward with the interface project.

> 1.1. The Facility completes the WyIR Provider Onboarding Readiness Checklist, to be sent by the WyIR Team.  Based on the results, the Facility will:
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>> • Determine it is ready to move forward with the project, and notify WyIR staff to continue to Step 1.2.
>>
>> • Determine it is not yet ready to move forward with the project.  The Facility, in conjunction with the WyIR Team and the EHR Vendor as necessary, will discuss barriers and develop a readiness action plan.
>
> 1.2. The WyIR Team will:
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>> • Contact the Facility Contact to discuss moving the project forward to the Planning stage, which includes discussing the WyIR Provider Onboarding Readiness Checklist**,** planning a kick-off call and EHR demonstration.
>>
>> • Provide the Facility with a copy of the WyIR Interface Project Stages document.
>>
>> • Verify that the Facility completes and submits an updated WyIR Provider Enrollment Agreement

**2. PLANNING** – Information is gathered to understand the interface's individual configuration needs and any modifications required in the EHR, in the Facility's business practice, or in the Facility's staff workflow or training.  Steps 2.1 and 2.2 may be combined if it is more convenient for all parties involved. The EHR Vendor is typically not involved at this stage, but may be at the request of the Facility.

> 2.1. A kick-off call is held between the WyIR Team, the THR Team and at least the Facility Contact.  During the call:
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>> • The Facility Contact completes the WyIR HL7 Facility Profile, used by the WyIR Team to track details such as the Facility's interface configuration, training needs, or issues/opportunities identified during the kick-off call.  Facility staff may begin filling out the profile prior to the kick-off call, which will assist Facility staff in understanding of the

type of information discussed on the call and will help ensure the correct Facility staff members are present for the call.

- The WyIR Team provides WyIR-related education to the Facility staff present.

- The WyIR Team reviews the WyIR Data Reporting Guidelines with the Facility Contact.

2.2. At least one Facility staff familiar with the day-to-day use of their EHR (multiple if different EHR modules are handled by different staff) demonstrates to the WyIR Team how they utilize their EHR on a daily basis using a remote meeting tool such as GoToMeeting.  In order to clarify any ambiguities documented in the WyIR HL7 Facility Profile, the WyIR Team may request to see the following:

- Both demographic and vaccination data entry workflows, and any alternative workflow methods, including the following:

  ◦ How a patient is added or updated.

  ◦ How a guarantor and guarantor's relationship to the patient is added or updated.

  ◦ How an administered vaccine is documented.

  ◦ How a historical vaccine is documented.

  ◦ How a contraindication is documented.

  ◦ How a vaccine refusal is documented.

- A comparison between the functionality present in the Facility's EHR and the WyIR for the following functionalities:

  o Forecasting recommended vaccinations for patients
  o Contacting patients that are due recommended vaccinations
  o Managing Vaccine Inventory

2.3. The Facility and WyIR Team ensure that all remaining questions or concerns documented in the WyIR HL7 Facility Profile are researched and documented.

2.4. The THR Team takes over in assisting with the technical connectivity process after Stage 2.3 is completed and before Stage 3 can begin.

**3. DEVELOPMENT** – Initial interface configuration is completed on both the WyIR side and the Facility side based on information gathered during the Planning stage, and is modified as needed until the Go Live stage.  Exact steps during the Development stage may vary depending on what was found during previous stages.

3.1. The WyIR Team provides the Facility ID to the Facility Contact, which is needed to ensure the proper mapping of the messages in the WyIR.

3.2. The Facility modifies the interface, facility business processes, and/or staff training.

3.3. The EHR Vendor offers support as changes are made.  The scope of changes involving the EHR Vendor can affect the project timeline. (For example: if the facility's current EHR version is

not able to collect data according to the [WyIR Data Reporting Guidelines](#), the facility might need to upgrade to a version that does collect the required data elements.)

3.4. All parties ensure that all known interface deficits, concerns, and issues are resolved.

**4. TESTING** – Connectivity testing is completed to ensure a functioning interface, and data is submitted through the THR Gateway to the PHC Hub, and reviewed by the WyIR Team to ensure quality standards are being met.

4.1. Connectivity testing ensures the interface's ability to securely send HL7 messages to the WyIR.

• The Facility staff or the EHR Vendor should inform the WyIR Team if the EHR can create but cannot securely send HL7 messages so the WyIR Team can provide tools to assist.

4.2. Data quality assurance testing reviews messages for completeness, accuracy and timeliness, and may reveal previously unknown interface, EHR, workflow, data entry or other issues needing additional attention.  The data quality assurance testing process will appear as follows:

• The Facility begins sending real patient data generated by the Facility's EHR through the THR gateway to the PHC Hub.  (Test data does not accurately assess readiness to move to the Go Live stage.)

• The Facility continues to send at least one month's worth of live patient data through the PHC Hub for comprehensive review.  The Facility will discuss with the WyIR Team any concerns regarding their ability to submit a dataset large enough to enable a comprehensive review.

• For providers who were connected to the WyIR via direct data entry prior to beginning the HL7 onboarding process, live data is not yet being submitted to the WyIR, thus the Facility continues to manually enter immunization records into the WyIR during this period in accordance with the [End User License Agreement](#) (i.e. double entry in the Facility's EHR and in the WyIR is required until the Go Live stage.)

4.3. The WyIR Team reviews the accumulated messages and provides feedback to the Facility regarding data quality.   The WyIR Team will ensure that the interface meets all WyIR requirements in accordance with the [CDC Implementation Guide for Immunization Messaging,](#) the [WyIR Health Level (HL7) Guide](#), state regulations and program policies. The Facility may share the feedback with their EHR Vendor at their discretion.

• A short list of required fields is presented in the [WyIR HL7 Fields](#) document, but this does not replace the comprehensive implementation guides.

4.4. The testing process may cycle several times until the interface is properly configured and existing issues are resolved.

**5. CERTIFICATION** – Data received by the PHC Hub is assessed to ensure that it accurately reflects the data contained in the Facility's EHR.

5.1. The Facility Contact reviews the **Provider Detail Error Report** and the **Import Profile Error Report** generated daily from the PHC Hub scheduler.

5.2. The WyIR Team reviews the **Provider Detail Error Report** and the **Import Profile Error Report** generated from the PHC Hub scheduler on a weekly basis.

5.3. Based on the results of the reports generated in the preceding steps, the WyIR Team and the Facility will conclude that either:

> • The Facility has achieved an error rate of 5% or below and is certified to move on to the following steps of the project.  Typically, the due diligence of the previous stages equates to a quick pass through.

> • The Facility has an error rate of greater than 5% and is not yet ready to move on to the following steps of the project.  The facility will research any issues and make necessary corrections, then continue to send data.  The WyIR will continue to assess on a weekly basis.  The project may be taken back to previous stages to address existing issues so that certification may be achieved.

**6. PREP FOR GO LIVE –** Final preparations are completed prior to the interface going live to begin submitting real time data in the WyIR.

> 6.1. The WyIR Team provides WyIR-related training to the Facility staff.  This training includes:

> > • Any general WyIR training required to meet the needs of the Facility

> > • Specialized training related to HL7 messaging, the interface, etc., including but not limited to ***Correct Lot Decrementing*** training.

> 6.2. The WyIR Team will ensure that the Facility Contact has all contact information needed to address any issues or concerns as they arise post-Go Live.

> 6.3. If the Facility is using the WyIR to manage their vaccine inventory, the Facility's inventory in the WyIR will be reconciled by the Facility staff.

> > • This includes all Facilities receiving state supplied vaccines, but can also include those using only private vaccine stock if the Facility uses the WyIR to manage their private vaccine inventory.

> 6.4. Any deficiencies in the interface and any resulting required interventions or additional responsibilities of the Facility are discussed and agreed upon by the WyIR Team and the Facility.

> > • This includes special arrangements based upon unique functions or limitations of the Facility's EHR.  For example: if a vaccine is deleted from the Facility's EHR and the interface cannot send an HL7 message that designates the vaccine as such, the Facility would be required to manually delete the corresponding information from the WyIR to ensure quality patient care.

> > • These agreements vary greatly depending on the Facility's EHR and other factors.

**7. GO LIVE** – Final changes are made to allow live data to pass to WyIR Production.

> 7.1. Settings and configurations are checked and any changes needed are completed.

> 7.2. The process is monitored closely for 2 weeks by all parties.

**8. ON-GOING QA AND COMMUNICATION** – Data continues to pass live through the interface.  Data quality assurance measures and any necessary follow-up steps are taken for the lifetime of the interface.